Lucent Technologies

User's Guide

CAJUN M770 MANAGER

CAJUNVIEW NETWORK MANAGEMENT

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Chapter 1

Welcome to Cajun M770 Management

Welcome to Cajun M770 Management. This chapter provides an introduction to the structure and assumptions of the manual. It includes the following sections:

- **The Purpose and Readers of this manual** - A description of the goals of this manual and its intended audience.
- **Organization of the manual** - A brief description of the subjects contained in the various sections of the manual.
- **Starting Cajun M770 Management** - Instructions on how to access Cajun M770 Management from your management platform.
- **Using Chassis View** - A brief introduction to the Cajun M770 Chassis View, including instructions on how to select elements and use the toolbar buttons.

The Purpose of this Manual

The Cajun M770 Manager manual contains the information needed to use the management system efficiently and effectively.

Who Should Use This Manual

This manual is intended for network managers familiar with network management and its fundamental concepts.

Organization of this Manual

This manual is structured to reflect the following conceptual divisions:

- Welcome to Cajun M770 Management - This section describes the manual's purpose, intended audience and organization.
- Agent Configuration - Viewing and modifying the agent configuration.
- Device Configuration - Viewing and modifying the different device configurations.
- Managers Configuration - Selecting managers to receive network traps.
- Fault Management - Selecting the traps to be sent by the network unit to the managers.
- Performance Monitoring - Viewing performance statistics for the ports in a Cajun M770 Multifunction Device.
- Port Mirroring - Configuring port mirroring on a Cajun M770 Mutifunction Device.

- Port Redundancy - Setting port redundancy for ports in a Cajun M770 Multifunction Device.
- Switch Connected Addresses - Viewing users and devices connected to selected ports.
- VLANs - Creating, viewing, and modifying VLANs.
- Management Menus - The full menu structure of the menus in Cajun M770 Device management.
- Configuration Fields - All configuration fields referenced and their descriptions.
- Counter Fields - All counter fields referenced and their descriptions.
- Trap Fields - All trap fields and their descriptions.

Starting Cajun M770 Management

This section provides instructions for starting Cajun M770 Management from the various supported management umbrellas.

What To Do First

To begin:

1 Login to the system using your account name.
2 Ensure that the management platform system is running correctly.

Running Cajun M770 Management from HP-OV for Windows

From the management platform map:

1 Double-click the icon representing the Cajun M770 Multifunction Device you want to work with.

OR

1 Select a Cajun M770 Multifunction Device.
2 Open the Lucent menu and select **Device Manager**.

Running Cajun M770 Management from NetView

From the management platform map:

1 Select the Cajun M770 Multifunction Device you wish to work with.
2 Open the Tools menu and select Lucent ▶ **Device Manager**.

OR

1 Right-click on the Cajun M770 Multifunction Device you wish to work with.
2 Select **Lucent: Device Manager**.

If you are using **OpenView (Solaris or HPUX)** or **NT-OV**:

1 From the management platform map, select the Cajun M770 Multifunction Device you wish to work with.

2 Click in the OpenView toolbar.

OR

Open the Tools menu and select Lucent ▶ **Device Manager**.

OR

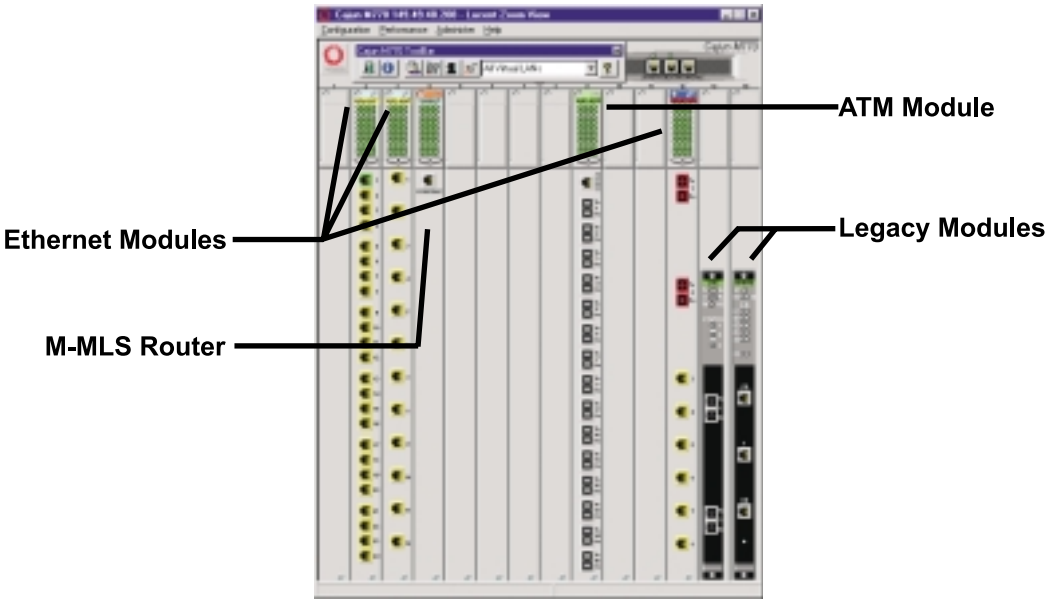
Right-click on the Device you want, and select Lucent ▶ **Device Manager**.

Using Chassis View

The Cajun M770 Chassis View is a graphical representation of a Cajun M770 Device which displays all modules installed in the chassis. This includes both Cajun M400 modules, DomainX modules, ATM modules, and M-MLS modules.

Legacy modules are only displayed in the Chassis View if there is an NMA-R*x* agent mounted in the Cajun M770. The NMA-R*x* agent should be mounted in the right-most slot (#14) of the Cajun M770. The 6U legacy modules are displayed in the Chassis View with padding to the width and height of the new 12U modules.

Figure 1.1 Chassis View



Launching Module Managers

The Cajun M770 Manager enables you to launch the manager of a legacy module, an ATM module, or router module from the Chassis View. To launch the manager of one of these modules:

1 Select the module.

2 Click .

OR

Open the Administer menu and select **Launch Device Manager**. The requested manager application is launched.

Selecting Elements

Within the Chassis View, you can select modules and ports. To select an element, click on it using the left mouse button. The selected element is highlighted.

To select multiple elements, press the CTRL key while clicking on each element to be selected.

Using the Toolbar Buttons

The Toolbar provides shortcuts to the main Chassis View functions.

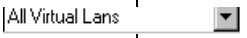
In a Windows environment the toolbar may be displayed as a floating horizontal toolbar or as a docked, vertical toolbar. To display the toolbar, open the Administer menu and select **ToolBar**. A check is placed next to the Toolbar option when it is activated. To dock the toolbar, drag it to the right edge of the Chassis View. To hide the toolbar, open the Administer menu and select **ToolBar**.

The table below describes the buttons on the Toolbar and gives the equivalent menu options.

Table 1.1 Chassis View Toolbar

Icon	Description	Menu Item
	Exit the application.	Configuration ▶ **Exit Zoom**
	View general device information.	Configuration ▶ **Device Information...**
	View the managers table.	Configuration ▶ **Managers Table...**
	View device hardware information.	Configuration ▶ **Device Hardware...**
	View device agent information.	Configuration ▶ Element ▶ **Agent...**
	View clock synchronization information.	Configuration ▶ **ATM Clock Sync...**
	Launch manager.	Administer ▶ **Launch Device Manager...**

Table 1.1 Chassis View Toolbar (Continued)

Icon	Description	Menu Item
	VLANs. A VLAN can be selected. All ports not associated with that VLAN are dimmed in the Chassis View.	
	Open on-line Help.	Help ▶ **Contents**

When you place the cursor on the toolbar icon for 1 second, a label appears with the name of the button.

Using Configuration Windows

When using the configuration windows:

- Click **OK** to upload information (if applicable) from the window to the appropriate agent, module, or port.
- Click **Cancel** to close the active window.

Agent Configuration

Before your network or Cajun M770 will work properly, your network agents must be properly configured. This chapter helps you properly setup and configure your agents, and includes helpful configuration notes for the different agent types. The following sections are included:

- **General Agent Installation and Configuration** - General information on agent configuration.
- **Designating Managers** - Assigning management stations for managing the Cajun M770 Device.

General Agent Installation and Configuration

The following topics describe how to set up and configure all Lucent Technologies agents.

Verifying Agent Installation

Before configuring your agents, make sure that each has been properly installed. Check that the agent has been properly connected to the device, and the IP address and community name for the agent have been set as described in the agent's Installation Guide.

Downloading New Agent Software

Downloading agent software is done using Cajun UpdateMaster. For instructions, please refer to the on-line help for Cajun UpdateMaster, or the *Cajun UpdateMaster User's Guide*.

Viewing the Agent Information Window

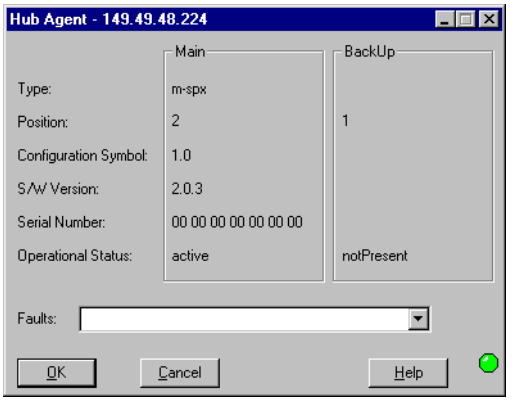
Every Lucent Technologies agent has an Agent Information window which provides you with details about the agent. To view the configuration of an agent:

1 Click .

OR

Open the Configuration menu and select Element ▶ **Agent**. The Agent Information window appears.

Figure 2.1 Agent Information Window



The Agent Information window provides information about the main and backup agents, such as their type, position, software version, and operational status.

For a full description of all configuration fields in the Agent Information window, refer to *Appendix B, Configuration Fields*.

Designating Managers

Agents send alarms to Managers' workstations that are on the agent's Manager list. Alarms will not be sent out to any other network management stations (NMS).

If you want to properly manage a device, your station should be one of its designated Managers. The Manager can be a Cajun M770 Management station or any other SNMP (Simple Network Management Protocol) management console.

Note: It is recommended to keep the list limited to actual and relevant managers so as not to place undue stress on the network.

Note: Refer to the Cajun M770 Installation Guide for an out-of-band method for editing a device's Manager list.

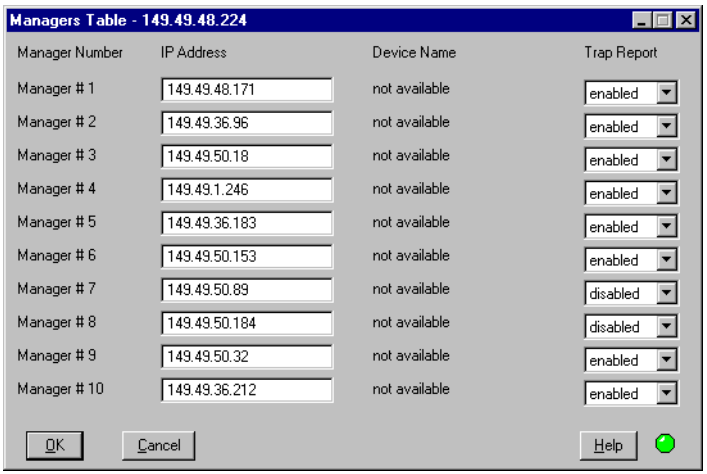
Viewing the Managers Table

To view the list of Managers:

1 Click on the toolbar.
OR

Open the Configuration menu and select **Managers Table**. The Managers Table dialog box appears.

Figure 2.2 Managers Table



The dialog box lists the IP addresses, node names of the Managers, and their trap reporting status.

Adding Managers to the Managers Table

To add managers to the list:

1 Click on the IP address field and enter the IP address of the designated management station. When the change takes effect, the management station's name will be displayed automatically in the Device Name column.
2 Repeat the procedure for each manager.
3 Click **OK**. The change takes effect immediately.

Note: The indicated manager will receive traps only when Trap Reports for that manager is **enabled**.

Removing Managers from the Managers Table

To remove managers from the list:

1 Click on the IP address field and enter **0.0.0.0**.
2 Repeat the procedure for each manager.
3 Click **OK**. The change takes effect immediately.

Updating the Managers Table

To edit the managers list:

1. Click on the IP address field and change the IP address of the designated management station. When the change takes effect, the management station's name will be displayed automatically in the Device Name column.
2. Repeat the procedure for each manager.
3. Click **OK**. The change takes effect immediately.

To close the Managers Table dialog box, click **Cancel**.

Chapter 3

Device Configuration

This chapter explains how to view and set the various configuration parameters relevant to devices on your network. It includes the following sections:

- **Viewing Device Information** - View device information about the Cajun M770 Device.
- **Viewing Hardware Configuration** - View power supply parameters of the Cajun M770 Device.
- **Viewing Module Configuration** - View information for the Cajun M770 modules.
- **Viewing Port Configuration** - View information specific to the ports of the Cajun M770 modules.
- **Viewing Domain Information** - View information about the DRUs in the DomainXs of the Cajun M770 Device.
- **Viewing ATM Clock Synchronization Configuration** - View clock synchronization parameters for the Cajun M770 Device.
- **Resetting Elements** - Reset various elements of the Cajun M770 Device.

Note: To view agent configuration, refer to Chapter 2, *Agent Configuration*.

Viewing Device Information

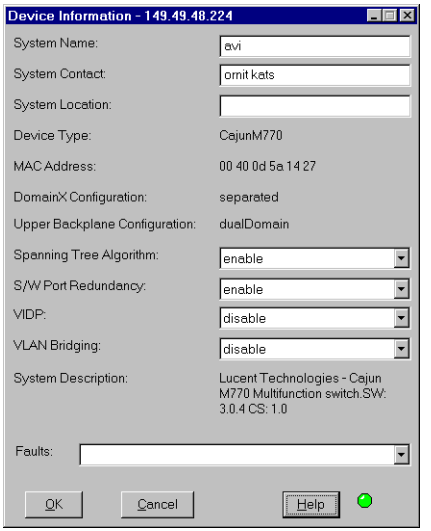
The Device Information dialog box provides high-level information specific to the selected Cajun M770 Device. To view the Device Information dialog box:

1 Click .

OR

Open the Configuration menu and select **Device Information**. The Device Information dialog box appears.

Figure 3.1 Device Information Dialog Box



The Device Information dialog box provides detailed information about the device such as the system name, description, contact, and location, the device type, its MAC address, and any faults that may have occurred on the device.

To apply any changes made to the information in the Device Information dialog box, click **OK**.

To close the Device Information dialog box, click **Cancel**.

For a full description of all fields in the Device Information dialog box, refer to *Appendix B, Configuration Fields*.

Viewing Hardware Configuration

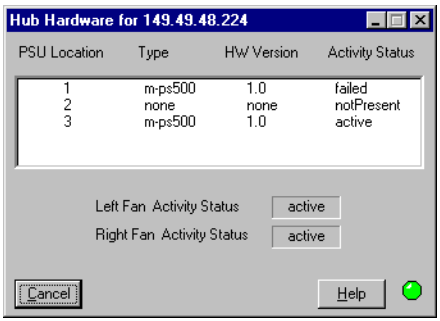
The Hub Hardware window provides information about the presence and status of Power Supply Units (PSUs) and fans. To view hardware parameters from Chassis View:

1 Click .

OR

Open the Configuration menu and select **Device Hardware**. The Hub Hardware window appears.

Figure 3.2 Hub Hardware Window



The Hub Hardware window shows the location, type, HW version, and status of the Power Supply Units (PSUs), and the status of the cooling fans.

For a full description of all configuration fields in the Hardware Information window, refer to *Appendix B, Configuration Fields*.

Viewing Module Configuration

The Device Configuration window provides you with information specific to a selected module. To view the configuration of a Cajun M770 module:

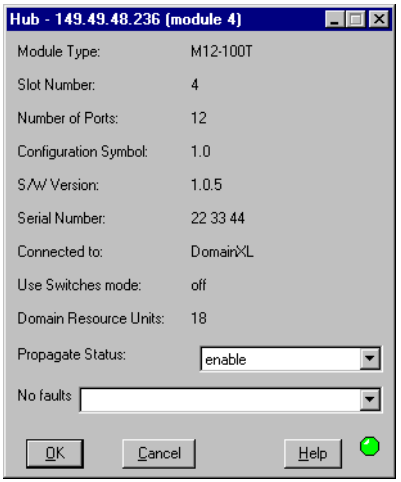
1 Select a module by clicking on its label.

2 Open the Configuration menu and select Element ▶ **Module.**

OR

Double-click on the module label. The Module Configuration window appears.

Figure 3.3 Module Configuration Window



The Module Configuration dialog box provides detailed information about the module such as the module type, its position in the device, number of ports, the version of its software, and its DRU usage.

To apply any changes made to the information in the Module Configuration dialog box, click **OK**.

To close the Module Configuration dialog box, click **Cancel**.

For a full description of all configuration fields in the Module Configuration dialog box, refer to *Appendix B, Configuration Fields*.

Viewing Port Configuration

The Port Configuration dialog box provides you with information specific to a selected port. To view the configuration of a port:

1 Select a port by clicking on it.

2 Open the Configuration menu and select Element ▶ **Port.**

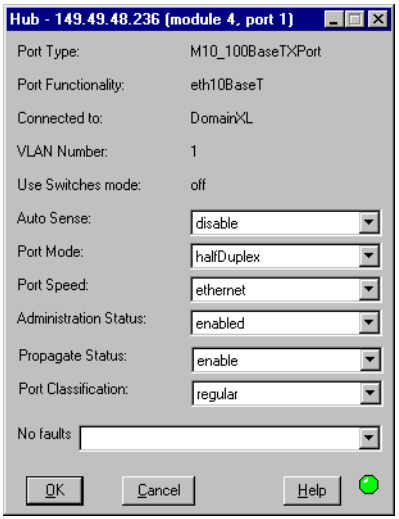
OR

Double-click on a port symbol.

OR

Right-click on a port and select **Port Configuration**. The Port Configuration dialog box appears.

Figure 3.4 Port Configuration Dialog Box



The Port Configuration dialog box provides detailed information about the port, such as the port type, its status, mode of operation, classification, and any faults with the port. The information fields in Port Configuration dialog box may vary according to the type of port selected.

For a full description of all configuration fields in the Port Configuration dialog box, refer to *Appendix B, Configuration Fields*.

Enabling Ports

To enable a port:

1 Select the port in the Chassis View.
2 Open the Configuration menu and select **Enable Port**. A confirmation box appears.
3 Click **Yes**. The port is enabled.

OR

1 Right-click on the port and select **Enable Port**. A confirmation box appears.
2 Click **Yes**. The port is enabled.

OR

1 Open the Port Configuration dialog box.
2 Change the Administration Status to **enabled**.
3 Click **OK** to apply the change. The port is enabled.

To enable more than one port:

1 Select multiple ports by holding down the CTRL key as you click on the ports.
2 Open the Configuration menu and select **Enable Port**. A confirmation box appears.
3 Click **Yes**. The selected ports are enabled.

Disabling Ports

To disable a port:

1 Select the port in the Chassis View.
2 Open the Configuration menu and select **Disable Port**. A confirmation box appears.
3 Click **Yes**. The port is disabled.

OR

1 Right-click on the port and select **Disable Port**. A confirmation box appears.
2 Click **Yes**. The port is disabled.

OR

1 Open the Port Configuration dialog box.
2 Change the Administration Status to **disabled**.
3 Click **OK** to apply the change. The port is disabled.

To disable more than one port:

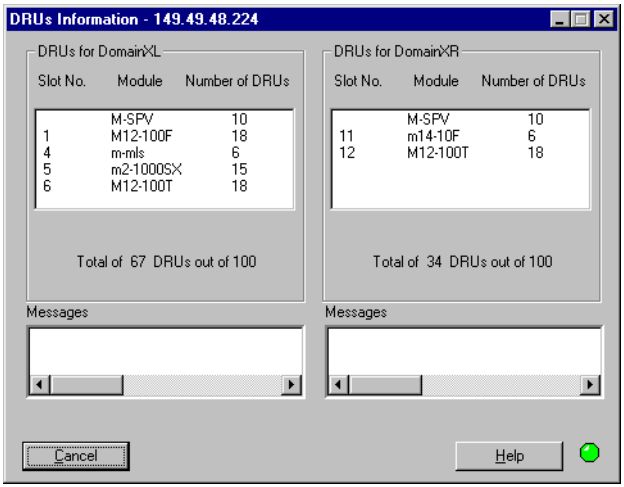
1 Select multiple ports by holding down the CTRL key as you click on the ports.
2 Open the Configuration menu and select **Disable Port**. A confirmation box appears.
3 Click **Yes**. The selected ports are disabled.

Viewing Domain Resource Unit Information

Each DomainX in the Cajun M770 Device has a total of 100 available DRUs. The DRUs Information window provides DRU usage information for each DomainX. To view the DRUs Information window:

1 Open the Configuration menu and choose **DRUs**. The DRU Information window appears.

Figure 3.5 DRUs Information Window



The DRUs Information window provides DRU information separately for the left and right DomainX. This information includes the type, slot numbers, and DRU information for each module in the device, and the total number of DRUs in use.

For a full description of all configuration fields in the DRUs Information window, refer to *Appendix B, Configuration Fields*.

Viewing ATM Clock Synchronization Configuration

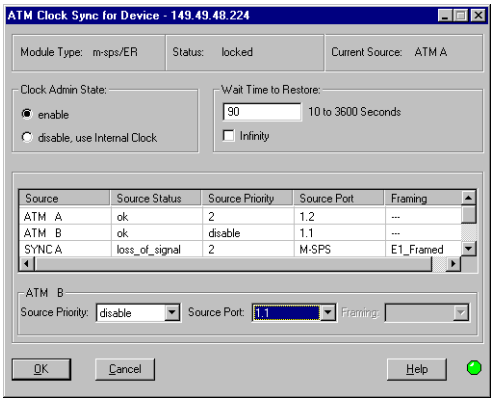
Some multimedia applications, such as voice, require that a single clock is propagated throughout the network. The clock source is usually a Public Telco switch connected to a local PBX through a telephony network. Using the Cajun M770 ATM Device, up to four external references can be configured, two from ATM ports and two from external E1/T1 sources. These are all directed to the M-SPS module which selects one of them to be the source input timing device. It uses the selected source to generate a 19.44MHz clock which is distributed to all modules. This is used by all ATM ports to synchronize Sonet frames.

The ATM Clock Synchronization dialog box provides information about the method currently configured for synchronizing the clocks in the Cajun M770 Device.

To view and edit clock synchronization parameters from Chassis View:

1 Click .
OR
Open the Configuration menu and select **ATM Clock Sync**. The ATM Clock Synchronization dialog box appears.

Figure 3.6 Clock Synchronization Dialog Box



The ATM Clock Synchronization dialog box shows the module type, status, and current source of clock synchronization. It also provides a table of clock synchronization parameters for all the clock sources, and allows you to edit their configurations.

To edit the configuration of a clock synchronization source:

1 Select one of the sources from the table.
2 Modify the parameters in the Row Configuration area of the dialog box.
3 Click **OK**. The configuration of the clock source is modified.

Note: When configuring the ATM source port, ensure that the ATM module/port can be used as a clock synchronization source. To have a synchronized ATM network, only modules with C/S 2.0 or higher should be in the Chassis. Suitable modules/ports are:

- Ports 1 and 2 on M15-155 modules.
- All ports on M3-622 modules.

For a full description of all configuration fields in the ATM Clock Synchronization dialog box, refer to *Appendix B, Configuration Fields*.

Resetting Elements

You can reset the entire Cajun M770 Device or various elements of the device without resetting the entire device.

Resetting the Device

To reset the entire device with all its modules and subsystems:

1 Open the Configuration menu and select Reset ▶ **Device**. The entire device is reset.

Resetting the Agent

To reset the M-SPV/M-SPX/M-SPS agent of the device:

1 Open the Configuration menu and select Reset ▶ **Agent**. The M-SPV/M-SPX/M-SPS agent CPU is reset. No other modules in the device are affected.

Resetting the Switch

To reset the agent and modules in the left DomainX:

1 Open the Configuration menu and select Reset ▶ DomainX ▶ **DomainXL**.

To reset the agent and modules in the right DomainX:

1 Open the Configuration menu and select Reset ▶ DomainX ▶ **DomainXR**.

Only the selected DomainX is reset.

Resetting the Module

To reset an individual module:

1 Select a module.

2 Open the Configuration menu and select Reset ▶ **Module**. Only the selected module is reset.

Fault Management

This chapter explains how to configure and view traps on your network. It includes the following sections:

- **Configuring Traps** - Defining the types of traps that will be sent to the managers and alarm log.
- **Viewing Traps** - Viewing the traps sent by the agent.

In UNIX and Windows NT:

- **Severity Degrees** - Defining, accessing and understanding severity degrees.

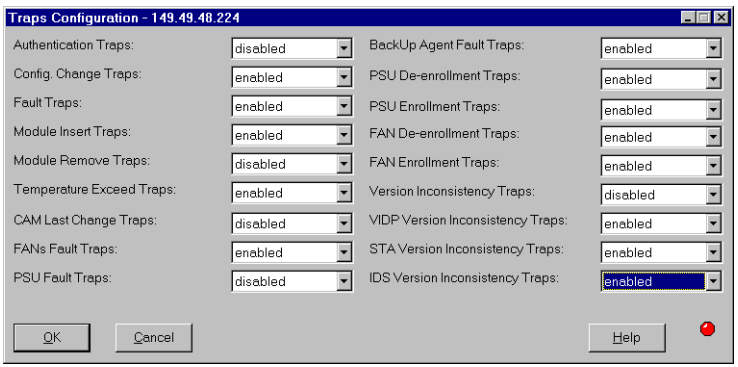
Configuring Traps

A trap is an SNMP message sent by the agent to its managers. Trap messages may appear in the Configuration Windows of the port or module affected, in addition to being sent to the management stations listed in the Manager's Table. You can set the types of traps the unit will forward to the management station you are configuring.

To configure traps:

1 Open the Configuration menu and select **Traps**. The Traps Configuration dialog box appears.

Figure 4.1 Traps Configuration Dialog Box



2 Enable the types of traps you want forwarded to the management station you are configuring.

3 Click **OK** to apply any changes.

To close the Traps Configuration dialog box, click **Cancel**.

For a full description of all traps in the Traps Configuration dialog box, refer to*Appendix D, Trap Fields* Appendix D, *Trap Fields*.

Viewing Traps

Traps that are sent by the agent to its managers may be viewed in two places:

- In the appropriate configuration dialog box.
- In the event log.

Viewing Traps in a Dialog Box

A list of traps sent by the agent is maintained by the management application. The list can be viewed in a dropdown list box in the Device Information, Module Configuration, and Port Configuration dialog boxes.

Viewing Traps in the Event Log

HP OpenView maintains a list of all traps sent by the agents on the network. They may be viewed by opening the Event Log from the HP OpenView network map window. For a full description of the Event Log, refer to the *HP OpenView Administrator's Guide*.

Assigning Severity Degrees (UNIX and NT-OV Only)

Management applications, using the Event Configuration application, allow you to set fault severity degrees system-wide, (for all devices on the network simultaneously), or for specific devices (per IP). If the system-wide setting and an individual device's setting disagree, the individual device's setting takes precedence.

For more information refer to *Severity Degrees* in *The Reference Guide*.

Accessing Severity Degrees

Only events whose category is "Status Events" affect the device's status. Events in this category may be found under the enterprises Lannet (.1.3.6.1.4.1.81) and CajunM770 (.1.3.6.1.4.1.81.17.1.15).

Severity degree settings may be accessed from the Event Configuration application. To open the Event Configuration application:

1 From the umbrella management application, open the Tools menu and select Lucent ▶ **Event Configuration**.

OR

Open the Options menu and select **Event Configuration**. The Event Configuration application appears.

Editing Severity Degrees

Severity degrees may be changed for faults on a system-wide basis, or for specific devices (per IP).

Caution: Do not change the Event Object Identifier of a fault.

Editing Severity Degrees System-Wide

To edit severity degree settings system-wide:

1. Select the enterprise which contains the fault whose settings you want to edit. A list of the faults under the enterprise appears in the Event Identification window.
2. Select the fault whose settings you want to edit.
3. Open the Edit menu and select **Modify Event**.
   OR
   Double-click the fault whose settings you want to edit. The Event Configurator window appears.
4. Change the severity setting using the Severity pull-down list.
5. Click **OK**.
6. Save the changes.
   — In HP OpenView and NT-OV: Select File ▶ **Save**.
   — In NetView: Click **Apply**.

Editing Severity Degrees for Specific Devices

To edit severity degree settings for specific devices:

1. Select the enterprise which contains the fault whose settings you want to edit. A list of the faults under the enterprise appear in the Event Identification window.
2. Select the fault whose settings you want to edit.
3. Copy the fault by opening the Edit menu and selecting **Copy Event**. The Event Configurator window appears.
4. Enter a name for the fault in the Event Name field.
5. Set **Source** to the IP address/es of the specific device/s you want the changes to be effective on.
6. Change the severity setting using the Severity pull-down list.
7. Click **OK**.
8. Save the changes.
   — In HP OpenView and NT-OV: Select File ▶ **Save**.
   — In NetView: Click **Apply**.

Note: All changes to the severity degrees will only take effect after the changes are saved.

Refer to the *HPOV Event Configuration* application help for more information.

Chapter 5

Performance Monitoring

This chapter explains the performance monitoring options of supported devices. It includes the following sections:

- **Viewing Ethernet Port Counters** - Provides a breakdown of the packets going through each port.
- **Viewing Ethernet Error Port Counters** - Displays different Ethernet Error counters for the Cajun M770 ports.

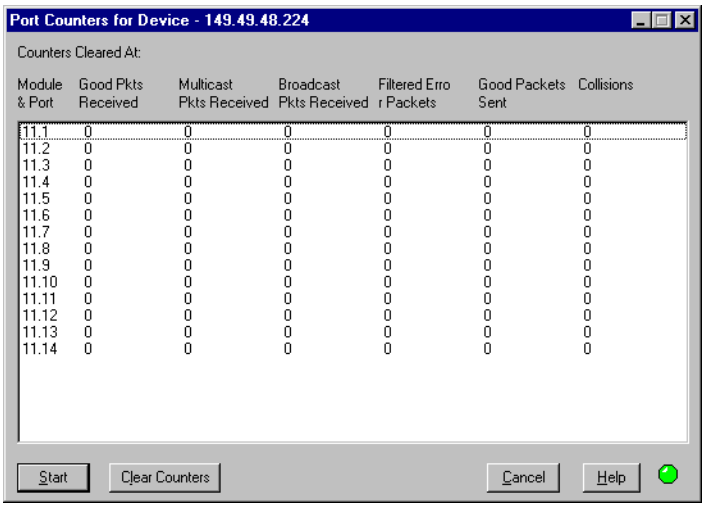
Viewing Ethernet Port Counters

Port Counters allow you to accurately view the packet flow activity of each port in the device. Once you learn what is normal packet activity for your network, Ethernet Port Counters will help you determine network malfunctions, bottlenecks and overloaded ports.

To view Ethernet Port Counters from Chassis View:

1 Select a port or ports to be monitored.
   — To select a single port, click on the port's symbol.
   — To select multiple ports, hold the CTRL key as you click on additional ports.
   — To select all Ethernet ports of a DomainX module, click on the module's symbol.
2 Open the Performance menu and select **Port Counters**. The Ethernet Port Counters window appears.

Figure 5.1 Ethernet Port Counters Window


Port Counters for Device - 149.49.48.224
Counters Cleared At:
Module & Port
Good Pkts Received
Multicast Pkts Received
Broadcast Pkts Received
Filtered Error Packets
Good Packets Sent
Collisions
11.1 0 0 0 0 0 0
11.2 0 0 0 0 0 0
11.3 0 0 0 0 0 0
11.4 0 0 0 0 0 0
11.5 0 0 0 0 0 0
11.6 0 0 0 0 0 0
11.7 0 0 0 0 0 0
11.8 0 0 0 0 0 0
11.9 0 0 0 0 0 0
11.10 0 0 0 0 0 0
11.11 0 0 0 0 0 0
11.12 0 0 0 0 0 0
11.13 0 0 0 0 0 0
11.14 0 0 0 0 0 0
Start
Clear Counters
Cancel
Help

Ethernet Counters are gathered for each selected port. The display is updated automatically every thirty seconds. To manually update the display, click **Start**.

Click **Clear Counters** to reset all the counter values to 0. The exact time you click this button will be entered in the Counters Cleared At field. When you click **Clear Counters** the counters are not reset on the agent.

To close the Ethernet Port Counters dialog box, click **Cancel**.

For a full description of all Ethernet port counters, refer to Appendix C, *Counter Fields*.

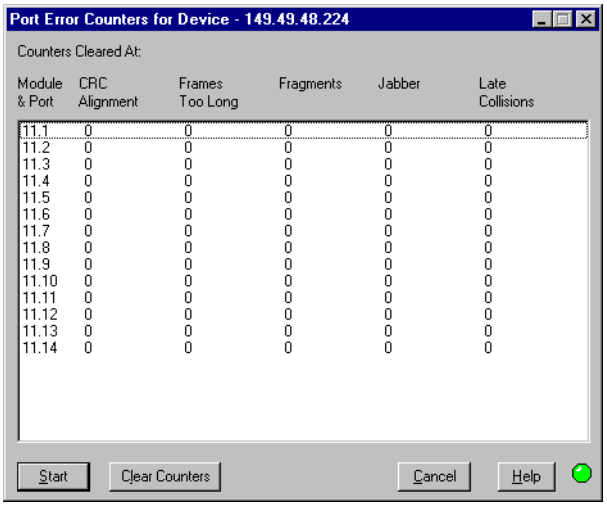
Viewing Ethernet Port Error Counters

As part of a proactive fault management system, or if you suspect that something is wrong, you may want to monitor port error counters.

To view Ethernet Port Error Counters from Chassis View:

1 Select a port or ports to be monitored.
   — To select a single port, click on the port's symbol.
   — To select multiple ports, hold the CTRL key as you click on additional ports.
   — To select all Ethernet ports of a DomainX module, click on the module's symbol.
2 Open the Performance menu and select **Port Error Counters**. The Port Error Counters window appears.

Figure 5.2 Port Error Counters Window


Port Error Counters for Device - 149.49.48.224
Counters Cleared At:
Module & Port
CRC Alignment
Frames Too Long
Fragments
Jabber
Late Collisions
11.1 0 0 0 0 0
11.2 0 0 0 0 0
11.3 0 0 0 0 0
11.4 0 0 0 0 0
11.5 0 0 0 0 0
11.6 0 0 0 0 0
11.7 0 0 0 0 0
11.8 0 0 0 0 0
11.9 0 0 0 0 0
11.10 0 0 0 0 0
11.11 0 0 0 0 0
11.12 0 0 0 0 0
11.13 0 0 0 0 0
11.14 0 0 0 0 0
Start
Clear Counters
Cancel
Help

Port Error Counters are gathered for each selected port. The display is updated automatically every thirty seconds. To manually update the display, click **Start**.

Click **Clear Counters** to reset all the counter values to 0. The exact time you click this button will be entered in the Counters Cleared At field. When you click **Clear Counters** the counters are not reset on the agent.

To close the Port Error Counters dialog box, click **Cancel**.

For a full description of all Ethernet Port Error Counters, refer to Appendix C, *Counter Fields*.

Port Mirroring

Port Mirroring copies all received and transmitted packets (including local traffic) from a source port to a predefined destination port, in addition to the normal destination port of the packets. The source and destination ports must be located in the same DomainX.

For more information, refer to *Port Mirroring* in *The Reference Guide*.

This section explains how to configure a device's ports to use Port Mirroring, and includes:

- **Accessing Port Mirroring** - Describes how to access the Port Mirroring dialog box.
- **Enabling Port Mirroring** - Describes how to enable and define source and destination modules and ports.
- **Disabling Port Mirroring** - Describes how to disable port mirrors.

Note: Port Mirroring is not permitted when there is no link on the destination port.

Caution: Do not change the VLAN of the source or destination port while the port mirroring mechanism is operating.

Accessing Port Mirroring

To open the Port Mirroring dialog box for a DomainX:

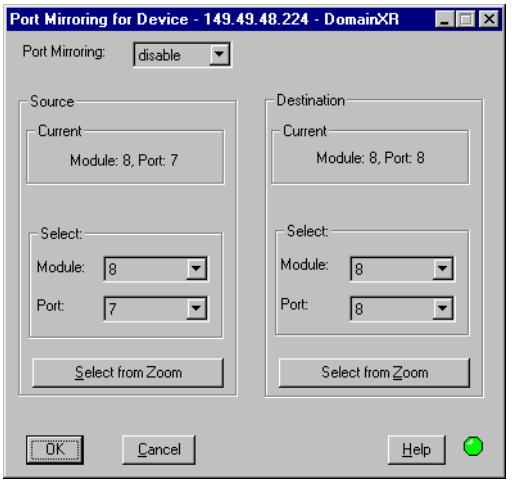
1 Open the Configuration menu, and select Port Mirroring ▶ **DomainXL** for the left DomainX.

OR

Open the Configuration menu, and select Port Mirroring ▶ **DomainXR** for the right DomainX. The Port Mirroring dialog box appears.

Note: When none of the ports in the switch support Port Mirroring, the **Port Mirroring** option in the Configuration menu is inactive.

Figure 6.1 Port Mirroring Dialog Box



The Port Mirroring dialog box displays configuration options for setting source and destination ports, current source and destination ports, and the Port Mirroring status.

For a full description of all configuration fields in the Port Mirroring dialog box, refer to Appendix B, *Configuration Fields*.

Enabling Port Mirroring

To enable port mirroring, you must define a source and destination port.

Note: Only a single pair of ports can be defined for port mirroring on each DomainX.

To enable Port Mirroring for the DomainX:

1 In the Port Mirroring dialog box, open the Port Monitoring drop-down list (refer to Figure 6.1) and select **Enable**.

2 Define source and destination ports in one of the following ways:

   a From the Module drop-down list, select a module number and a port number.

OR

   a In the Chassis View click on the port you want to set.

   b In the Port Mirroring dialog box, click **Select from Zoom**. The port and module numbers appear in the Port Mirroring dialog box (refer to Figure 6.1).

3 Click **OK**.

The manager sets the source and the destination ports for copying packets, enabling Port Mirroring.

Disabling Port Mirroring

To disable Port Mirroring:

1 In the Port Mirroring dialog box, open the Port Monitoring drop-down list (refer to Figure 6.1) and select **Disable**.

2 Click **OK**.

Received and transmitted packets are not copied from one port to another.

To close the Port Mirroring dialog box, click **Cancel**.

Port Redundancy

Port Redundancy enables you to define a redundancy relationship between any two ports in a device. One port is defined as the primary port and the other as the secondary port. In case the primary port fails, the secondary port will take over. This connection between the two ports is called a Port Redundancy.

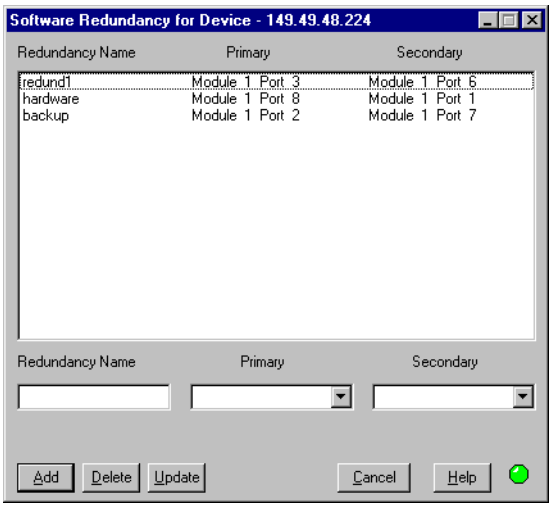
For more information refer to *Redundancy* in *The Reference Guide*.

Viewing Port Redundancy Information

To access Port Redundancy:

1 Open the Configuration menu and select **Software Redundancy**. The Port Redundancy dialog box appears.

Figure 7.1 Port Redundancy Dialog Box



The Port Redundancy dialog box provides a list of all port redundancies established on the device, with their respective primary and secondary ports.

Adding a Port Redundancy

To designate a port redundancy connection:

1 In the Port Redundancy dialog box, enter a name for the redundancy in the Redundancy Name field. For example, `Redund1`.

Note: The name for a redundancy may not contain any spaces.

2 Select a primary port from the Primary field.
3 Select a secondary port from the Secondary field.
4 Click **Add**.

The new port redundancy is added to the list of existing port redundancies.

To close the Port Redundancy dialog box, click **Cancel**.

Note: Ports that have already been designated in one redundancy scheme, may not be selected for another one.

Editing a Port Redundancy

To edit an existing redundancy connection:

1 In the Port Redundancy dialog box, click on the redundancy connection you wish to edit. The connection information appears in the boxes at the bottom of the Port Redundancy window.
2 Change the information as desired.
3 Click **Update**.

The current port redundancy in the list is updated according to the modifications made.

Deleting a Port Redundancy

To delete a port redundancy connection:

1 In the Port Redundancy dialog box, click on the redundancy connection you wish to delete.
2 Click **Delete**.

The port redundancy is deleted from the list.

Switch Connected Addresses

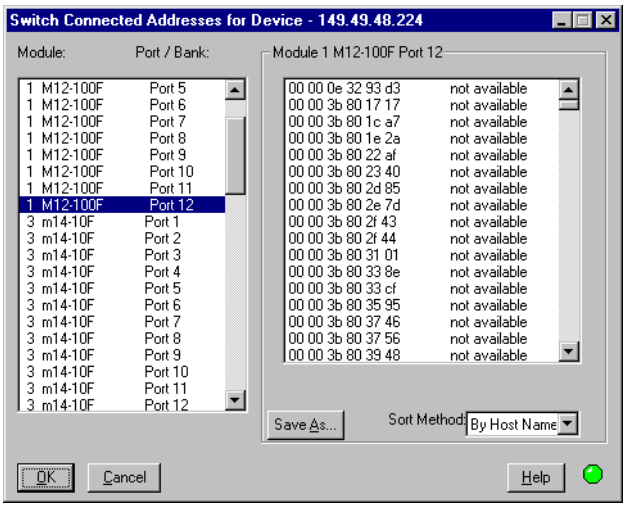
Networks are becoming increasingly complicated entities. It is not always clear which users are connected to the network and how. The Switch Connected Addresses feature allows you to see which users and devices are connected to selected ports or modules. Keeping track of this information in the network can increase efficiency, security and confidentiality.

Switch Connected Addresses provides a list of all selected ports along with the names (IP address or host name), if available, and MAC addresses of the elements connected to them.

To view the connected stations:

1 Open the Configuration menu and select **Switch Connected Addresses**. The Switch Connected Addresses for Device window appears.

Figure 8.1 Switch Connected Addresses for Device Window


Switch Connected Addresses for Device - 149.49.48.224
Module:
Port / Bank:
Module 1 M12-100F Port 12
1 M12-100F Port 5
1 M12-100F Port 6
1 M12-100F Port 7
1 M12-100F Port 8
1 M12-100F Port 9
1 M12-100F Port 10
1 M12-100F Port 11
1 M12-100F Port 12
3 m14-10F Port 1
3 m14-10F Port 2
3 m14-10F Port 3
3 m14-10F Port 4
3 m14-10F Port 5
3 m14-10F Port 6
3 m14-10F Port 7
3 m14-10F Port 8
3 m14-10F Port 9
3 m14-10F Port 10
3 m14-10F Port 11
3 m14-10F Port 12
00 00 0e 32 93 d3 not available
00 00 3b 80 17 17 not available
00 00 3b 80 1c a7 not available
00 00 3b 80 1e 2a not available
00 00 3b 80 22 af not available
00 00 3b 80 23 40 not available
00 00 3b 80 2d 85 not available
00 00 3b 80 2e 7d not available
00 00 3b 80 2f 43 not available
00 00 3b 80 2f 44 not available
00 00 3b 80 31 01 not available
00 00 3b 80 33 8e not available
00 00 3b 80 33 cf not available
00 00 3b 80 35 95 not available
00 00 3b 80 37 46 not available
00 00 3b 80 37 56 not available
00 00 3b 80 39 48 not available
Save As...
Sort Method:
By Host Name
OK
Cancel
Help

The rows of the Switch Connected Addresses window comprise the following information:

- **Module** - The number of the module and the module type.
- **Port/Bank** - The number of the port in the module.
- **List of stations connected to port** - When a port is selected, the stations connected to the port are listed. These stations can be sorted by the MAC address or host name, or they can be left unsorted.

Sorting the List of Stations

To sort the list of stations, open the drop-down list in the Sort Method field and select a field. The list is immediately sorted upon selection of a sort field.

Saving the List of Stations

The list of stations connected to the port may be saved as a text file by clicking the **Save As** button. The Save As dialog box will open and prompt you for the directory and file name you wish to save the list to. This list can then be referenced in the future using any text editor.

Chapter 9

VLANs

This chapter provides all the information and instructions you need to use virtual LANs. It includes the following sections:

- **Creating and Editing VLANs** - Explains how to access and edit the VLAN list.
- **Allowing Inter-VLAN Communication** - Explains how you can allow selected users to have access to all the VLANs.

For more information about VLANs, refer to *VLANs* in *The Reference Guide*.

Creating and Editing VLANs

The building blocks of VLANs are switch ports. To build a new VLAN you need to select a VLAN name and number and then decide which switch ports will be members of the VLAN.

The default VLAN on the Cajun M770 Device can be set to VLAN 0 (Generic) or VLAN 1 (Default) using the command line interface. For more information, refer to *The Cajun M770 User's Guide*. You can change the VLAN configuration on a per port basis.

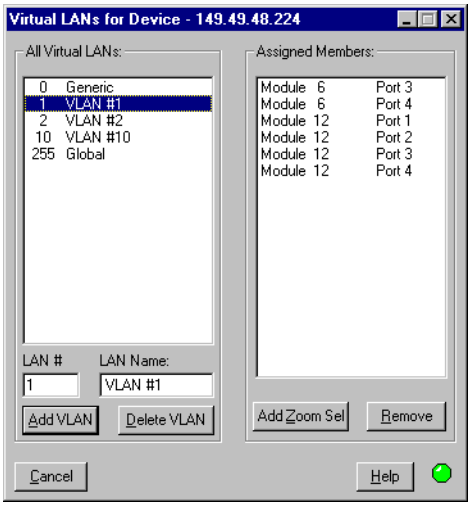
In order to be compliant with the IEEE 802.1Q VLAN standard, you have to modify ports with VLAN 0 to another VLAN.

Accessing the VLAN List

To create or edit VLAN names, numbers or component switch ports you need to access the VLAN list:

1 Open the Configuration menu and select **Virtual LANs**. The Virtual LANs for Device dialog box appears.

Figure 9.1 Virtual LANs for Device Dialog Box



The left column of the Virtual LANs for Device dialog box lists all VLAN names and numbers. Click on a name to select a VLAN. The right column lists member switch ports of the currently selected VLAN.

Editing VLAN Names and Numbers

To add to the list of VLANs:

1 Click on the LAN # box and enter a number between 1 and 254 that does not already exist in the Virtual LAN list.

2 Click on the LAN Name box and enter a VLAN name. Any name can be used.

3 Click **Add VLAN**. The new VLAN will be added to the All Virtual LANs list.

To delete from the list of Virtual LANs:

1 Select the VLAN you wish to delete.

2 Click **Delete VLAN**. The VLAN disappears from the list. If there were any elements left on the Assigned Members list you will be asked for confirmation and those elements will be deleted from the VLAN and placed in the default VLAN.

Editing VLAN Member Ports

To assign ports to VLANs:

1 Arrange the windows so you can see the Virtual LANs for Device dialog box and the Chassis View at the same time.

2 From the All Virtual LANs List, select the VLAN you wish to edit.

3 In the Chassis View, click on the ports you wish to add to the VLAN (use CTRL-click to select multiple ports). By selecting a DomainX module (use CTRL-click to select multiple modules), you select all ports contained within those elements.

4 Click **Add Zoom Sel** in the Virtual LANs for Device dialog box. The selected switch ports are assigned to the selected VLAN and automatically deleted from any other VLAN.

Note: To view the ports associated with a specific VLAN, choose the VLAN from the VLAN dropdown listbox on the Zoom View toolbar. The active ports associated with the chosen VLAN will remain highlighted. All other ports will be dimmed.

To disassociate switch ports from VLANs:

1 From the Virtual LANs for Device dialog box, select the VLAN you wish to edit from the All Virtual LANs list.

2 On the Assigned Members list, locate and click on the switch port you wish to delete.

3 Click **Remove**. The port is removed from the list and automatically reassigned to the default VLAN. Repeat this procedure for every port you wish to remove from the VLAN.

Allowing Inter-VLAN Communication

Individual switch ports may be given the status of "Global Port". Global ports can communicate with all VLANs. This feature has many uses:

- Executives or administrators in a company can give their switch ports Global port status so they can access all VLANs.
- A server attached to a Global port can serve many VLANs.
- Indirect communication between VLANs can be arranged. Via a server attached to the Global port, packets (mail, for example) may be transferred to any VLAN.

To give the status of Global Port to a switch port:

1 From the Chassis View, open the Configuration menu and select **Virtual LANs**.
2 Arrange the windows so you can see the Virtual LANs for Device dialog box and the Chassis View at the same time.
3 From the Virtual LANs list, select Global (# 255).
4 In the Chassis View, select the switch port you want to set to Global Port status (use CTRL-click to select multiple switch ports).
5 Click **Add Zoom Sel**. The selected switch parts are assigned to Global and automatically deleted from any other VLAN.

Cajun M770 Management Menus

This appendix gives the full menu structure of the menus in the Cajun M770 management application.

Configuration

Table A.1 Configuration Menu

Item	Description
Device Information	Displays information about the device.
Element ▶ **Agent**	Displays configuration information for an agent.
Element ▶ **Module**	Displays configuration information for a module.
Element ▶ **Port**	Displays configuration information for a port.
Enable Ports	Enables the selected port/s.
Disable Ports	Disables the selected port/s.
Traps	Displays trap configuration information.
Managers Table	Displays managers configuration information.
Software Redundancy	Displays and enables configuration of software redundancies.
Device Hardware	Displays the device hardware information.
Port Mirroring ▶ **DomainXL**	Displays and enables configuration of port mirroring on the left DomainX.
Port Mirroring ▶ **DomainXR**	Displays and enables configuration of port mirroring on the right DomainX.
Virtual LANs	Displays and enables configuration of virtual LANs.
Switch Connected Addresses	Displays a list of stations connected to each of the device's ports.

Table A.1 Configuration Menu (Continued)

Item	Description
DRUs	Displays Domain Resource Unit usage for the right and left DomainX.
ATM Clock Sync	Displays clock synchronization information.
Reset ▶ **Device**	Resets the entire hub with all its modules and subsystems.
Reset ▶ **Agent**	Resets the M-SPV agent CPU only.
Reset ▶ DomainX ▶ **DomainXL**	Resets the left DomainX.
Reset ▶ DomainX ▶ **DomainXR**	Resets the right DomainX.
Reset ▶ **Module**	Resets the selected module.
Exit Zoom	Exits Chassis View.

Performance

Table A.2 Performance Menu

Item	Description
Port Counters	Displays information about packets of information received by and sent from a given port.
Port Errors Counters	Displays information about packets of information received by a given port that generated errors.

Administer

Table A.3 Administer Menu

Item	Description
Launch Device Manager	Launches the Cajun M400 Manager, the Cajun M770 ATM Manager, or the Cajun Routing Manager, depending on the module selected.

Table A.3 Administer Menu (Continued)

Item	Description
SMONMaster	Launches the Cajun SMONMaster application if an SMON probe exists in the device.
ToolBar	Toggles the toolbar on and off.

Help

Table A.4 Help Menu

Item	Description
Contents	Opens the on-line help for information.
About Cajun M770 Manager	Copyright information about the Cajun M770 Manager.

Configuration Fields

Field Name	Description
Activity Status	The port activity status: • **Active** - The port is enabled, and data is transferred through the port. • **Dormant** - The port is enabled, but data is not transferred through it, e.g., because the port acts as the backup port in a pair of redundant ports. • **NotActive** - The port is disabled.
Administration Status	The state of the port: • **Enabled** - The port is enabled and can transmit and receive packets. • **Disabled** - The port is disabled and cannot transmit or receive packets.
Auto Negotiation	The configured state of the Auto-Negotiation protocol between two stations. When enabled, Auto-Negotiation detects the highest common denominator for the flow control capabilities of the endstations, and sets both to the same highest common setting. It also delivers remote link status. For more information, refer to *Auto-Negotiation* in *The Reference Guide*.
Clock Admin State	The administered clock synchronization state of the M-SPS module. Possible states are: • **enable** - Clock synchronization is enabled on the device. • **disable, use Internal Clock** - Clock synchronization is disabled on the M-SPS module. The M-SPS module uses its internal low accuracy (±20 ppm) oscillator.

Field Name	Description
Clock Status	The status of clock synchronization on the device. Possible statuses are: • **locked** - The M-SPS module is using a clock which is locked to the input timing source. • **holdover** - The M-SPS module is simulating a clock to which it was previously locked. This state will last until the clock source is fixed. • **free_running** - The M-SPS module is using its ±4.6 ppm oscillator to generate timing. This only occurs after a reset when there are no healthy timing sources available or when all four sources are disabled. • **internal** - Clock synchronization is disabled and the M-SPS module is using its low accuracy (±20 ppm) internal oscillator to generate timing.
Configuration Symbol	For Module Configuration: The version of the module. The version is updated whenever there is a functional modification to the module. For Agent Configuration: The version of the hardware and firmware of the agent.
Connected To	The DomainX to which the selected module is connected - **DomainXL** for the left DomainX and **DomainXR** for the right DomainX.
Current Source	The current source clock used for clock synchronization. Possible sources are: • **ATM A/B** - An ATM port on the device. • **SYNC A/B** - An external source connected to the front panel of the M-SPS. • **none** - No recognizable clock source.
Device Type	The device type.
Domain Resource Units	The number of Domain Resource Units for the module.
DomainX Configuration	The configuration of the backplane of the Ethernet switch in the device.
Faults	A list of faults.

Field Name	Description
Framing	The framing type of the external clock source. Possible types are: For M-SPS/ER: • **E1_Framed** • **E1_Unframed** For M-SPS/T: • **DS1_SF** • **DS1_ESF** For ATM A/B: • **---**
HW Version	Hardware version of the power supply. Stored in X.0 format, where X=1,2,....
MAC Address	The MAC address of the device, agent, or ring interface.
Module Type	The module type.
Number of Ports	The number of ports located on the module.
Operational Status	The status of a redundancy element, generally a port. On the Cajun M770 Device, it may refer to the status of the redundancy agent. Possible statuses are: • **Enabled** - The redundant element is enabled. • **Disabled** - The redundant element is disabled. • **Active** - The redundant element is currently active. • **Inactive**, **Dormant** - The redundant element is enabled but not active. For more information refer to *Redundancy* in *The Reference Guide*.

Field Name	Description
Port Classification	The level of importance of the port. Ports are classified as follows: • **Backbone** - device or switch connections (most important). • **Valuable** - servers or critical users (less important). • **Regular** - normal users (least important). For more information refer to *Port Classification* in *The Reference Guide*.
Port Functionality	The physical media type of the selected port. If the port conforms to a certain standard (Repeater, Transceiver, 10BaseT, etc.), this standard is displayed. If the port does not conform to any standard, Private is displayed.

Field Name	Description
Port Mode	The operational mode of the port or ports on the module. Not all modules support all modes. Both sides of the link must be in the same mode. Flow Control and ISL (Interswitch Link) are recommended for backbone links with Lucent Technologies' equipment. Note that the Port Speed field will be insensitive if the Use Switches field is set to ON. The components which make up the mode are: • **Half Duplex (HDX)** - The port operates in Half Duplex. • **Full Duplex (FDX)** -The port operates in Full Duplex and doubles its speed. No repeaters are allowed in the path. • **Flow Control (FC)** - Flow Control is a proprietary mechanism that prevents packet loss on the link due to congestion in the Full Duplex mode. • **Interswitch Link (ISL)** - Interswitch Link is a proprietary mechanism to tag packets with VLAN and priority information across the backbone. This allows two Lucent devices to act as a single logical entity. The possible modes are: • **Half Duplex (HDX)** • **Full Duplex (FDX)** • **Full Duplex and Flow Control (FDX+FC)** • **Full Duplex and Interswitch Link (FDX+ISL)** • **Full Duplex, Flow Control, and Interswitch Link (FDX+FC+ISL)**
Port Speed	The Ethernet speed of the port. Port speed can be either Ethernet (10 Mbps), Fast Ethernet (100 Mbps), or Gigabit Ethernet (1000 Mbps). Some units have 10BaseT/100BaseTX ports, where each port can work in either 10Mbps or 100Mbps.

Field Name	Description
Port STA State	The state of the port in terms of the Spanning Tree Protocol. The possible states are: • **Disabled** - The port is disabled. • **Blocking** - STP is enabled and currently blocking the port. This means that the port is effectively disabled to prevent the formation of a loop in the network. • **Forwarding** - The port is currently forwarding information received. For more information refer to *Spanning Tree Algorithm (STA)* in *The Reference Guide*.
Port Type	The port type; optionally includes reference to the module to which it is attached and port connector type.
Position	The position of the main and backup agent (either 1 or 2) within the device.
Propagate Status	The state of status propagation on the port or module. When enabled, the status of a port or module is passed up one level. For example, when the Propagate Status field of a problematic port is enabled, the port's icon as well as the module that the port is located on appears red. If Propagate Status is disabled, only the port icon appears red. The following colors indicate the status of the port or module: • Red - Fatal • Grey - Disabled (port only) • Yellow - Warning • Green - Okay By default, status propagation is enabled for all ports and modules.
S/W Port Redundancy	The state of the port redundancy function between two ports. Possible states are **on** and **off**.
S/W Version	The version of the application software running on the module or agent.

Field Name	Description
Serial Number	A unique number assigned by Lucent Technologies to the selected hardware.
Slot Number	The slot number in which the module is located. Slots are numbered from left to right, starting with number 1 as the leftmost slot. This number may be 1 - 14. The agent module is inserted in either slot 15 or 16. A module which occupies two enclosure slots, will be identified by the number of the second slot (the right-hand slot). The slot number is the position in which the module is located. There can be up to 5 modules in a device. The Slot Number is set using the rotary switch on the back panel of the device.
Source	The timing source whose parameters appear in the table row. Possible sources are: • **ATM A** - An ATM port on the Cajun M770 ATM switch. • **ATM B** - An ATM port on the Cajun M770 ATM switch. • **SYNC A** - An external source connected to the front panel of the M-SPS module. • **SYNC B** - An external source connected to the front panel of the M-SPS module.
Source Port	The configured timing source port for clock synchronization. The source port can be one of the ATM ports on the Cajun M770 ATM switch or an E1/T1 external source connected to the M-SPS front panel. Suitable ATM ports/modules are: • Ports 1 & 2 on M15-155 modules with C/S 2.0 or higher. • All ports on M3-622 modules with C/S 2.0 or higher.

Field Name	Description
Source Priority	The priority of the timing source. The source with the highest priority that is healthy will be selected as the current source. The valid range of priorities is: **disable** - The source is disabled. **1** - **4** - 4 is the highest.
Source Status	The status of the timing source. Possible statuses are: • **ok** - The timing source is healthy and is detected on this source. • **loss of signal** - The timing source is not detected on this source. • **failed** - The timing source is detected but is not healthy.
Spanning Tree Algorithm	The state of Spanning Tree Protocol. Possible states are: • **Disabled** - STA is disabled. This is the default state. • **Enabled** - STA is enabled. When activating STA, keep in mind that: • All bridges should run STA. • Redundancy applications and STA cannot co-exist. • The Security application and STA cannot co-exist. • STA can be activated in Cajun P110 only when an agent module exists. Standalone modules (including Cajun P113F and Cajun P117 Devices) cannot run STA. For more information refer to *Spanning Tree Algorithm (STA)* in *The Reference Guide*.
System Contact	Individual responsible for maintenance of the device.
System Description	A description of the type of system being used.
System Location	The physical location of the device.

Field Name	Description
System Name	Logical name of the system as defined on the SNMP agent of the device.
Type	The agent type.
Upper Backplane Configuration	The configuration of the upper backplane of the Cajun M770 device, used for ATM switch modules. Possible values are: • **Not Installed** - No upper backplane is installed. The device can not operate as an ATM switch. • **Single Domain** - The upper backplane supports a configuration of one ATM switch for all 14 slots. • **Dual Domain** - The upper backplane supports a configuration of two separate ATM switches. One switch includes slots 1 - 7, the other switch includes slots 8 - 14.
Use Switches (Mode)	The state of the usage of hardware switches. The mode is set to use switches (**on**) or not to use switches (**off**).
VIDP	The state of VIDP (VLAN Information Distribution Protocol). Possible states are "**enabled**" and "**disabled**". For more information refer to *VIDP (VLAN Information Distribution Protocol)* in *The Reference Guide*.
VLAN Bridging	VLAN Bridging allows a station on one VLAN to communicate with a station on another VLAN using the bridging capabilities of the M-MLS router. To enable this feature, the M-MLS router must be configured to enable bridging between specific VLANs. Possible values of the VLAN Bridging field are: • **enabled** - If bridging has been configured on the M-MLS router, the switch allows communication between the VLANs specified in the M-MLS router. • **disabled** - The switch does not allow inter-VLAN communication.

Field Name	Description
VLAN ID	The VLAN number of the port. Valid VLAN numbers are from 1 - 3071.
VLAN Number	The number of the VLAN of which the port, ports on the module, or the agent is a member. Change the number in this field to move the port to another VLAN. A port which is part of the Generic network will have the VLAN Number 0 (zero), and a port which is part of the Global network will have the VLAN Number 255. This field is relevant only if the Routing Mode field (if it exists) is set to Virtual Routing. The number is assigned when the network is defined, using the VLAN option of the Configuration menu. The VLAN Number can also be assigned using the VLANs option in the Configuration dialog box. Important: The VLAN # of an agent must be set to one of the existing LAN numbers for a port of the device housing the agent (otherwise, you might not be able to communicate with the agent).
Wait Time to Restore	The amount of time the M-SPS module waits before trying to lock onto a healthy timing source with a higher priority. The valid range is from 10 - 3600 seconds. If you do not want the device to return to a higher priority source unless all of the current sources fail, set this parameter to infinity by checking the **Infinity** checkbox. **9999** is displayed in the Wait Time to Restore field.

Counter Fields

Field	Description
Broadcast Pkts Received	Total number of broadcast packets that entered the Ethernet port.
Collisions	Total number of Ethernet collisions in which the port was involved.
CRC Alignment	Total number of Ethernet packets received at this port with FCS error and Framing error. This indicates the number of corrupted packets received.
Filtered Error Packets	Total number of error packets (CRC, alignment, or excessive length errors) that entered the Ethernet port.
Fragments	Total number of Ethernet packets received at this port whose octet count is less than the minimum standard packet length.
Frames Too Long	Total number of Ethernet packets received at this port whose octet count is greater than the maximum standard packet length.
Good Packets Sent	Total number of packets of legal length without errors that were sent by the Ethernet port.
Good Pkts Received	Total number of packets of legal length without errors that entered the Ethernet port.
Jabber	Total number of Ethernet packets received at this port that are too long and include CRC errors.
Late Collisions	Total number of Ethernet packets received at this port that have late collision errors.
Module & Port	The number of the module and port.
Multicast Pkts Received	Total number of multicast packets that entered the Ethernet port.

Trap Fields

Field	Description
ATM Clock Sync Traps	A group of traps which report the failure of ATM clock synchronization in the device.
Authentication Traps	An SNMP request with an illegal community was received.
Backup Agent Fault Traps	The trap reports the failure of the backup MSPV agent in the Cajun M770.
CAM Last Change Traps	The trap reports the last time the Contents Address Memory was changed.
Config. Change Traps	A group of traps which report a change in the configuration of the device.
FAN De-enrollment Traps	The trap reports the removal of a fan from the device.
FAN Enrollment Traps	The trap reports the insertion of a fan into the device.
FAN Faults Traps	The trap reports the failure of a fan.
Fault Traps	A group of traps which report a fault in the device.
IDS Version Inconsistency Traps	The trap reports that the software on the module is outdated and does not support IDS.
Module Insert Traps	The trap reports the insertion of a module in the device.
Module Remove Traps	The trap reports the removal of a module from the device.
PSU De-enrollment Traps	The trap reports the removal of a PSU from the device.
PSU Enrollment Traps	The trap reports the insertion of a PSU into the device.

Field	Description
PSU Fault Clear Traps	The trap reports that the PSU failure was corrected.
PSU Fault Traps	The trap reports the failure of a PSU.
STA Version Inconsistency Traps	The trap reports that the software on the module is outdated and does not support STA.
Temperature Exceed Traps	Notifies the management station of the internal board/enclosure temperature fluctuations. It is generated when the temperature exceeds the hardware defined threshold on the module.
Version Inconsistency Traps	The trap reports that the software on the module is outdated and does not support the full functionality available from the device.
VIDP Version Inconsistency Traps	The trap reports that the software on the module is outdated and does not support VIDP.

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W

Welcome to Cajun M770 Multifunction Device Management 1

Who should use Cajun M770 Multifunction Device Management 1